

## 2001 ANNUAL REPORT

The Interstate Commission on the Potomac River Basin focused its efforts in 2001 on building and maintaining partnerships with many organizations and government agencies to preserve and protect the water and related resources of the Potomac. The ICPRB pursued a range of projects that enhanced inter-jurisdictional cooperation on living resource, water quality, water supply, and information issues. This report highlights just a few of the many projects in which the commission was involved. These efforts continue to assist the ICPRB member jurisdictions in reaching and involving a growing number of basin residents and organizations in the goal of protecting and preserving the river, its resources, and the quality of life of the basin's residents. *Understanding and Renewing Living Resources.*

### Chairman's Report

**by James Gilford, Maryland Commissioner and  
ICPRB Chairman**

The ICPRB by virtue of its representation is uniquely positioned to pursue its mission to enhance, protect and conserve the water and associated resources of the Potomac River Basin through regional and interstate cooperation. Even so, achieving the acceptance and support of private and public interests involved in the conservation and development of those resources is, to no great surprise, a demanding and time-consuming task.



The value of such a basin-wide perspective was recognized more than 50 years ago. In the final chapter of his book, "The Potomac," published in 1949 as part of the *Rivers of America* series, Frederick Gutheim wrote the following: "One must admit, and regret, the fact that people of the Potomac Region are barely conscious of the Potomac as a whole, well as they may know it in part." These sentiments can apply to ICPRB as well. The current downturn in the economy and the drought conditions stressing the Potomac watershed are making the commission's mission even more challenging. Securing funding for the commission's work is a major and ever-present challenge. Although Congress currently is not honoring its obligation under the ICPRB Compact to share the direct financial support of ICPRB's activities with the other Potomac basin jurisdictions, the commission continues to seek an avenue for inclusion in the federal budget process.

The compact that created the Commission in 1940 does not grant authority to regulate, so ICPRB relies on the rational application of sound scientific data and technical assessments to address water resource problems in the basin. Commission projects assist federal, state, and local regulatory agencies, water suppliers, private organizations, and the public at large in understanding and resolving water-related problems throughout the basin. In a complimentary approach, ICPRB also actively encourages and assists basin jurisdictions to coordinate their activities and cooperatively to address water resources problems.

While the work of the commission benefits all of the citizens of the basin, some of its achievements are more visible than others. The important role of the ICPRB staff in analyzing and forecasting the supply and demand for water in the basin and in helping to coordinate its use is well known, so much so that it diverts attention from the commission's role in protecting the basin's water quality and its living resources. Yet, the commission's involvement in water supply, water quality, and living resources are inseparable, and overlap a great deal, and well they should! Effective drought management of the metropolitan area water supply requires comprehensive watershed management. **Understanding the effects of management efforts in meeting water supply needs on water quality, fisheries, and the ecosystem as a whole is essential to avoid compromising other uses.** Especially critical is the relationship between rivers and streams throughout the basin and groundwater tables. The link between surface and groundwater is certain to play a major and more-visible role in the management of the basin's water resources in the future. For that reason, the ICPRB is leading the basin toward a comprehensive examination of groundwater, and its role in river and basin health. The ICPRB will accomplish the task through building partnerships, performing research, and providing information needed to make sound decisions about the basin in the future.

In the year ahead, the Commission should continue to press for funding from Congress. It should continue its efforts to protect living resources of the basin, enhance water quality and preserve the natural amenities of the river. And it should actively promote a basin-wide perspective among the watershed's residents while building an informed constituency to support the work of the Commission.

**From the Executive Director's Desk**  
**by Joseph Hoffman, ICPRB Executive Director**

On behalf of the staff of the Interstate Commission on the Potomac River Basin, I am pleased to provide an Annual Report of our operations for 2001. The past and present efforts of the professional, technical and administrative staff members of the Commission to use sound science to protect and conserve the water and related land resources of the Potomac basin continues. We are involved in numerous activities in the 14,600 square mile watershed of the Nation's River.



This report details a few of these activities. First and foremost, we provide significant resources in a commitment to our member jurisdictions. Our staff efforts can be considered to complement the staffs of the member jurisdictions and their agencies. As an example, we are supporting source water assessments, nearing completion of work on a project for the District of Columbia that looks at potential sources of contamination and providing a susceptibility analysis. We also are beginning support for total maximum daily load (TMDL) projects in Pennsylvania, Virginia and continuing support efforts for both Maryland and the District. This latter action includes modeling work on the Anacostia River, a focus of many parties in our region.

As we all deal with the aftermath of September 11, 2001, its resulting economic downturn, our national recovery and response, and our need to be prepared for future events, the Commission and its professional staff can be supportive in many ways. Our Commissioners and staff were in session in our 2001 annual meeting when the news of 9-11 was delivered. The date will be permanently etched in our minds and hearts.

The future of the basin is bright. Cooperative efforts to move forward on a variety of program actions for improving the water quality of the basin continue on many fronts. Watershed planning and management is in the forefront for many agencies as we work to enhance tributary quality, eliminate pollution sources by treatment or implementing best management practices throughout the basin, and tackle potential sources of contamination of drinking water supplies.

As this report is written, drought plagues the basin, a frequent concern since late 1998. We do not have

enough information about our groundwater, a vital part of our basin water resources. We need the ability to have real-time data, similar to our real-time surface water data provided through the streamgaging network operated by the U. S. Geological Survey that is so readily available on the internet. We need the capability to understand more about the groundwater. With our basin-wide focus and technical skills, ICPRB is an ideal agency to take on the leadership in the effort.

We need to merge information from the groundwater assessment of the basin into a comprehensive, long-range plan for the basin. Keeping our mission - **to enhance, protect and conserve the water and associated land resources of the Potomac River basin and its tributaries through regional and interstate cooperation** - in mind, we have to have a plan in place in order to achieve the mission. Groundwater can be a start!

For the past year, we all have been distracted by the events that have demanded the collective attention of the country. We can't build for the future if we have doubts about the security of the country. We also must not lose sight of the environmental and resources security that are needed for the future of the Potomac River basin.

### **From the Commission**

Many basin residents gage the health of local waterways by the quality of fishing, which depends on the health of the supporting ecosystem. The ICPRB initiates or participates in many projects to restore the river's living resources and better understand the complex relationships in a healthy ecosystem. These projects included migratory fish restoration projects, biological monitoring in Pennsylvania, and working to integrate biological data from throughout the basin into a format accessible by researchers from different disciplines and resource managers in the basin.

Since 1995, the ICPRB's American shad restoration project has annually sought to place at least one-million shad fry into the Potomac to assist in returning stocks to healthy levels that will again allow fishing and restoration of the species as a major, valuable part of the ecology. The species was once one of the most economically important fish in the watershed. Stocks declined rapidly in the last century from pollution, overfishing, and loss of habitat. Bans on harvest and better water quality have improved the fish's chances for a comeback. The ICPRB-coordinated effort, along with the systematic modification of stream blockages that restricted upstream spawning runs are now bearing results. In 2001, 41 volunteers assisted in placing approximately 3.3-million shad fry in the Mather Gorge area of the Potomac, which was reopened to spawning runs with the

modification of the Little Falls Dam in early 2000. The shad project involves several partners throughout the region, including the Chesapeake Bay Foundation, the Potomac Conservancy, and the many schools that assist in raising the shad fry in their classrooms.

The ICPRB also is restoring herring to the Anacostia River. As mitigation for building the new span of the Woodrow Wilson bridge, the Potomac Crossing Consultants awarded ICPRB a contract for restoration efforts. The ICPRB is working closely with the Metropolitan Washington Council of Governments on this multi-year project and the Maryland Department of Natural Resources cooperates through a state fish hatchery. Other organizations working in partnership on the project include the Potomac Conservancy, the Anacostia Watershed Society, Earth Conservation Corps, and the Chesapeake Bay Foundation.

The ICPRB continued working with Pennsylvania to assess the biological integrity of its streams within the Potomac basin. Several western Potomac tributary streams, including Licking Creek and Little Cove Creek, were studied by ICPRB staff as part of the project. The project assisted Pennsylvania in developing a complete assessment of its streams to guide preservation work.

The commission is continuing work on integrating data collected from throughout the non-tidal portions of the Potomac basin. Data are being standardized, increasing its usefulness, and are being accessed by a growing number of researchers, students, and teachers. The value of multi-disciplinary approaches to researching the Potomac ecosystem increases with the amount of historical data available for assessment. Reams of research about the Potomac can provide a wealth of information for new efforts, but data from different sources often are in disparate formats that are not easily compared. Recently, a multi-year ICPRB project was completed that interpreted disparate data collected from many sources in the tidal portions of the Potomac basin. Data for the tidal portions of the basin can now be used with greater confidence by researchers. In turn, the work will increase the confidence and quality of management decisions that will help determine the face of the Potomac River and Chesapeake Bay in the future.

Several ICPRB staff work closely with the regional Chesapeake Bay Program to assist in making data more usable and available. During the last several years, a growing number of living resources and water quality data sets, including communities of benthic (bottom dwelling) communities, plankton, chlorophyll, and fisheries, are being made available over the internet. The increased ease of access to the data has led to its increased use, including more than 300 retrievals in 2001.

### *Improving Basin Water Quality*

The cooperative efforts to improve the watershed's living resources are complemented by strong efforts to protect and enhance water quality. During the year, ICPRB worked with basin jurisdictions to assess the quality of their waterways and implement measures to improve them. These projects included working with basin jurisdictions on developing Total Maximum Daily Loads (TMDLs) and helping local organizations create and implement water quality protection projects. The TMDLs are plans that determine the maximum amount of a pollutant that a waterway can receive, while supporting designated uses, and allocates that maximum load among the sources. The Potomac basin jurisdictions are producing TMDLs for waterways that are not able to support designated uses. Commission staff are characterizing the streams, and developing mathematical models needed for assessing impacts and producing the plans. The models help water quality managers understand how waterways transport and process materials such as toxins, sediment, nutrients, and bacteria. With these models, managers can evaluate options for reducing pollutant loads.

In the Anacostia watershed, ICPRB is working in partnership with the state of Maryland and the District of Columbia on several water quality models for the tidal and non-tidal portions of the river. These models, which Maryland and the District of Columbia water quality managers use to create TMDLs for the Anacostia, focus on sediment and toxin transportation, the impact of sediment concentrations in the river, and dissolved oxygen levels.

In Pennsylvania, ICPRB has begun working with state officials to develop plans for several watersheds the Potomac basin. As in the Anacostia, ICPRB is developing models to characterize impacted watersheds. These models build on the efforts of ICPRB's Living Resources Section, which is conducting field work for Pennsylvania's biological assessment of these waterways.

The ICPRB continues to facilitate a variety of projects throughout the Anacostia River basin. The commission, working with the Anacostia River Business Coalition (ARBC) with funding provided by the Chesapeake Bay Program and the District of Columbia Environmental Health Administration, is assisting with the development of several demonstration rain gardens that will promote creation of other rain gardens to mitigate storm runoff. Rain gardens are designed to help reduce contaminants entering the Anacostia River via stormwater runoff. The gardens are being constructed by ICPRB, ARBC business partners, and volunteers working to improve the condition of the river. The ICRPB and ARBC also are developing a Watershed Stewardship program. The program will provide information to business owners throughout the Anacostia basin on techniques

they can implement in their business and at industrial and technical sites to prevent pollutants from entering the Anacostia river.

Several ICPRB staff members work directly with the bay program staff at their Annapolis, Md. headquarters. The ICPRB's involvement with the bay program provides the commission with a unique opportunity to provide for two-way dialogue. The commission's staff involvement provides a Potomac perspective on bay issues. In turn, the commission provides its member jurisdictions with insight into the bay program initiatives. The ICPRB staff facilitate this dialogue through their involvement on many bay program committees including the Water Quality Steering, Implementation, and Budget committees; the Living Resources, Toxics, Monitoring, and Modeling sub-committees; and the Monitoring and Modeling Workgroup.

The water quality staff also are involved with several other inter-jurisdictional working groups including the Maryland Upper, Middle, and Lower Tributary Teams, the Virginia Nutrient Strategy and Potomac Roundtables, and the West Virginia Watershed Framework. To all of these projects, ICPRB lends its expertise in watershed modeling, water quality and database analysis, and regional coordination.

#### *Water Resources Coordination in the Potomac Basin*

The ICPRB plays several important roles in providing for the region's current and future water supply needs while helping to safeguard its quality. A primary role for the commission's Water Resources Unit is the coordination of ICPRB's Section for Cooperative Water Supply Operations (CO-OP). The CO-OP Section facilitates agreements among the three major metropolitan water suppliers to share resources during times of low flow. The Water Resources Unit also provides technical water resources management assistance to the jurisdictions throughout the basin.

Preparing for the possibility of low-flow conditions is a major annual activity of the CO-OP section. The CO-OP works with the region's water suppliers to enhance low-flow operating procedures so that operations run smoothly. Additionally, the CO-OP section works closely with the Metropolitan Washington Council of Governments (COG) to assist in the coordination of regional response to low-flow conditions. After the 1999 drought revealed a lack of consistency in local and state government responses to conditions, a regional drought response plan was developed by a COG-coordinated task force. The CO-OP section works with COG and the Drought Coordination Committee to assist in providing accurate and timely information to basin residents during low-flow conditions in the Potomac.



Also throughout 2001, ICPRB's water resources staff worked on the District of Columbia's Source Water Assessment Program (SWAP). The project includes several phases. The initial phases of the project, which included determining the watershed serving the District's water supply system and an inventory of possible contamination sources, have been finished. The SWAP project's anticipated completion date is mid-2002.

### *Providing Potomac Basin Information*

The ICPRB provides valuable information about the Potomac River basin for citizens, researchers, and agencies from all levels of government. Production of the *Potomac Basin Reporter*, ICPRB's bi-monthly newsletter highlighting issues of current interest in the Potomac basin, will continue throughout the year. The Reporter is distributed to more than 15,000 individuals, organizations, and libraries in and out of the Potomac River basin. Throughout the new year, ICPRB staff improved and updated the agency's website to include even more information on issues within the basin and more interactive tools that will provide easier access to Potomac basin information. Additionally, ICPRB responds to a growing number of information requests. These requests, many of which are received by e-mail through ICPRB's website, come from throughout the basin and the world.

International water resource issues were highlighted by another visit from the Potomac's sister river organization, the Arakawa-Sakura Club. The group, visiting from the Ara River basin in Japan, spent a week exploring the Potomac basin, learning about basin issues, and sharing information about their experiences in the Ara basin in Japan. The group included two high school students and a teacher who visited several schools in the basin. The group hopes to increase educational exchanges through closer relationships between U.S. and Japanese schools. The commission also supported the efforts of a group of Japanese young people who walked across the U.S. to commemorate the 1951 peace treaty signed by Japan and the U.S. The walk began in Mount Vernon, and traversed the Potomac basin before heading west.

Through newly created Watershed Coordinator position, ICPRB is providing more resources to foster the growth of and resources for basin watershed organizations. A directory of the organizations, created initially for the Potomac Visions Project, was updated to include contact information, missions, and other information on watershed organizations. The directory will be available on-line with maps showing locations of the many organizations throughout the Potomac Basin.



## **Fiscal Year 2001 Budget (October 1, 2000 through September 30, 2001)**

### **REVENUES**

Signatory Contributions	
Maryland	\$131,000
Pennsylvania	\$40,100
Virginia	\$126,500
West Virginia	\$45,300
District of Columbia	\$58,100
Total Signatory Contributions	\$401,000
Grants and Projects	
Maryland DOE	\$102,526
Pennsylvania DEP	\$84,380
Virginia DEQ	\$16,948
District of Columbia DOH	\$194,350
EPA Section 106	\$531,800
EPA Section 117	\$327,799
VA Chesapeake Bay Restoration Fund	\$12,000
National Fish and Wildlife Foundation (Ches Bay Prog)	\$8,000
US Army Corps of Engineers	\$13,380
CO-OP Utilities	\$187,461
Potomac Crossings Consultants	\$23,000
Friends of the Potomac	\$1,000
Potomac River Swim	\$1,000
Geo-Centers, Inc.	\$18,475
Total Grants and Projects	\$1,522,119
Miscellaneous Revenue	\$5,975
<b>TOTAL REVENUES</b>	<b>\$1,929,094</b>

### **EXPENSES**

Salaries and Related Costs	\$1,351,461
Rent	\$115,742
Equipment Purchase & Rental	\$31,269
Office Expense	\$54,892
Travel	\$36,874
Education, Pubs and Printing	\$53,006
Meeting Expenses	\$10,085
Audit and Accounting, Bonds and Insurance	\$24,138
Consultants	\$43,587
Contracts	\$160,466
<b>TOTAL EXPENSES</b>	<b>\$1,881,520</b>

